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REMARKS

Reconsideration of the above referenced application in view of the enclosed amendments and remarks is requested. Claim 29 has been amended. Claims 1-37 remain in the application.

ARGUMENT

Claims 1-2, 4-7, 9-10, 13-15, 17-21, 23, 25-31, and 33-37 are rejected under 35 USC 103(a) as being unpatentable over O'Brien (US 6,351,776) in view of Namba (US 5,996,448).

Embodiments of the present invention are directed to a system and method for supporting multiple authentication and/or encryption schemes over a connection on a network. The system uses a trusted arbitrator to support multiple authentication and/or encryption schemes to allow a secure virtual connection between two entities, each entity supporting a different authentication and/or encryption protocol. In one embodiment, the trusted arbitrator may be implemented as a trusted third-party web site, one entity may be outside of a local area network (LAN) accessible via the Internet, and the other entity may be inside the LAN (protected by a firewall or proxy server), with the entities using different authentication and/or encryption techniques to communicate with each other.

In embodiments of the present invention, as shown in Figure 3 of the present Specification, there are several entities. The source entity desires to establish a secure connection to a target entity using the services of the trusted arbitrator. The target entity is contained within a LAN, and may, in some embodiments, be accessed via a connection entity, also within the LAN. Access to the LAN's components is protected by an access control mechanism. The connection entity interacts with the trusted arbitrator to create the secure connection between one of the LAN-connected components and the trusted arbitrator. The source entity also obtains a connection to the trusted arbitrator. In at least one case, when the source entity and the target entity support different authentication and/or encryption

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protocols, the trusted arbitrator acts as an Intermediary to translate communications between the two entities over the two secure connections.

In marked contrast, O'Brien discloses an Internet file sharing system called an "X-drive." The X-drive operates as a virtual hard drive, allowing a user to store files on a central server (file server) connected to the user's PC over the Internet. The user can access the stored files from other computers as well. O'Brien's system allows a user to use the X-drive server to store files essentially "on the web" and make them globally accessible as opposed to storing them only locally on the user's PC. In O'Brien's system, one user's PC does not ever have a secure connection established directly or contemporaneously with another user's PC. Instead, in O'Brien's system, one user can simply store a file on the Internet-based X-drive file server and another user (or the same user operating from another computer) can subsequently access the file.

O'Brien does not teach or suggest many of the limitations of claim 1. First, O'Brien does not teach or suggest the concept of a trusted arbitrator as disclosed and claimed. The X-drive file server of O'Brien is not trusted as that term is understood to those skilled in the art, and the file server does not act as an arbitrator for establishing secure connections. Second, O'Brien does not teach or suggest establishing a secure connection between a source entity and a target entity. As stated above, O'Brien does not provide for a contemporaneous communications connection between two user computers. Third, O'Brien also does not teach or suggest that the request from the source entity to the trusted arbitrator relates at least in part to establishing the secure connection between the source entity and the *target entity*, as is currently claimed. Fourth, the Examiner purports to map the teachings of O'Brien regarding a first user as the claimed source entity and a second user as the claimed target entity. However, O'Brien does not teach or suggest that the first user can establish a connection to the second user at all. Instead, O'Brien merely describes a well known asynchronous file sharing feature. This is not a network communications "connection" as is well understood by those skilled in the art. Fifth, O'Brien teaches or suggests nothing about a connection entity (separate from a target entity coupled to the same LAN). Sixth, O'Brien does

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not teach or suggest that the response from the trusted arbitrator to the connection entity is associated with the request (e.g., the claimed first request) from the source entity to the trusted arbitrator. Finally, O'Brien does not teach or suggest (as the Office action admits) anything about secure connections and multiple encryption schemes.

The Office action then cites Namba, at col. 7, lines 44-50 and 63-66, and col. 8, lines 1-12. Namba discloses a system for communicating data from one terminal using a first cryptographic system on one LAN to another terminal using a second cryptographic system on another LAN. The application of Namba does not cure the many deficiencies of O'Brien with respect to claim 1. First, the Office action at page 2 purports to map the wide area network (WAN) shown by Namba as the claimed trusted arbitrator. This is incorrect. A WAN merely operates to perform data communications operations as is well known. A WAN does not act as a trusted arbitrator as presently described in the Specification and claimed. Thus, Namba does not teach or suggest a trusted arbitrator. Second, nowhere does Namba teach or suggest anything about a connection entity as described and claimed. The Office action purports to map LAN B to the claimed target entity *and* the connection entity. But these are clearly different components of claim 1. In sum, the application of Namba in combination with O'Brien does not cure the deficiencies of O'Brien as stated in at least the second through sixth items in the previous paragraph. The combination of the teachings of O'Brien and Namba do not result in claim 1.

Further, there is no motivation for one skilled in the art to combine these two references. One skilled in the art would not combine the file server of O'Brien with the cryptographic communications system of Namba, because the combination would not result in the claimed invention. The Office action cites the motivation "to make the files secure and protected from hackers." This might be a noble goal in general, but it has nothing to do with the present invention. The present invention is not a file server, nor is it a cryptographic system per se; instead, embodiments of the present invention allow entities to communicate with each other over the Internet where one of the entities is on a LAN (and perhaps behind an access control mechanism (proxy server, firewall, etc.)) and the entities support different

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authentication and/or encryption protocols. Neither of the cited references addresses the problem solved by the present invention and a combination of the teachings of O'Brien and Namba is useless as a foundation for arriving at the presently claimed invention.

For the foregoing reasons, independent claim 1 is allowable as presented. For similar reasons, independent claims 9 and 17 are also allowable. Consequently, all claims dependent from claims 1, 9, and 17 are also allowable.

With respect to independent claim 35, this claim recites a complete system for establishing a secure connection, including a computer network having a target entity, a connection entity coupled to the target entity, and an access control mechanism; a trusted arbitrator; and a source entity. The claim recites the limitation that the computer network and the source entity employ the same encryption scheme. The claim also recites limitations describing a secure connection being set up between the source entity and the computer network.

The Office action is noticeably deficient in addressing claim 35. It is lumped together with claims 1, 9, 17, and others in a very sparse rejection. However, it is of markedly different scope than the other independent claims, and cannot be properly rejected on the same basis. The combination of O'Brien and Namba does not teach or suggest this particular arrangement of claimed elements. An appropriate examination of this claim is respectfully requested. Without more, claim 35 has not been properly addressed, and the Patent Office has failed to fulfill its burden with respect to examination of this claim. Therefore, claim 35 is allowable as presented.

Since claim 35 is allowable as presented, claims dependent therefrom (e.g., claims 36-37) are also allowable.

Although claims dependent from independent claims 1, 9, and 17 are clearly allowable based on the foregoing discussion, the Applicants wish to comment on several additional improperly rejected claims.

As to claims 2, 4, 10, 20, 21, and 23, the Office action cites O'Brien at col. 18, lines 35-39, as teaching these limitations. This is completely wrong. The cited text of O'Brien does not teach or suggest authentication at all. Authentication is well known to those skilled in the art and there is no mention of the concept of

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authentication anywhere in O'Brien, and certainly the cited text teaches nothing applicable to these claims. The Applicants respectfully request that the Examiner admit this error of interpretation of the disclosure of O'Brien and allow these claims.

With respect to claims 18 and 19, two different entities on the computer network are claimed. Claim 18 recites that a secure connection is established between the trusted arbitrator and the connection entity. Claim 19 recites that a secure connection is established between the trusted arbitrator and the target entity. Based at least on the principles of claim differentiation, it is clear that these are two different components. As discussed above, the mapping of the teachings of Namba to *both* the connection entity and the target entity is improper. Namba does not teach or suggest these components. Additionally, there is no adequate explanation of the rejection of claims 18 and 19 in the Office action. A mere blanket rejection of a set of claims without discussion does not fulfill the burden of the Patent Office to reject claims with specificity. Claims 18 and 19 are allowable as presented.

With respect to claim 26, it claims that the access control mechanism is a firewall. The Office action is entirely deficient in stating where this is taught or suggested in the cited art. The cited art does not meet this limitation. Claim 26 is allowable as presented.

As to claim 34, since neither O'Brien nor Namba discloses a connection entity and a target entity, the combination of references does not teach or suggest the limitation of the connection entity forwarding at least a portion of the first request to the target entity. Hence, any rejection of claim 34 is faulty and must be withdrawn.

Claims 3, 11, 22, and 24 are rejected under 35 USC 103(a) as being unpatentable over O'Brien (US 6,351,776) in view of Namba (US 5,996,448), and further in view of Wood (US 6,691,232).

These claims are allowable based on their dependency from their respective allowable independent claims.

Claims 8, 16, and 32 are rejected under 35 USC 103(a) as being unpatentable over O'Brien (US 6,351,776) in view of Namba (US 5,996,448), and further in view of Jaamies (US 6,138,037).

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These claims are allowable based on their dependency from their respective allowable independent claims.

Claims 12 is rejected under 35 USC 103(a) as being unpatentable over O'Brien (US 6,351,776) in view of Namba (US 5,996,448), and further in view of Kung (US 5,434,918).

Claim 12 is allowable because it depends from allowable independent claim 9.

CONCLUSION

In view of the foregoing, Claims 1-37 are all in condition for allowance. If the Examiner has any questions, the Examiner is invited to contact the undersigned at (503) 264-8074. Early issuance of Notice of Allowance is respectfully requested.

Respectfully submitted,

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